

CLAIM AMENDMENTS

1. (Currently amended) A method for introducing a nucleic acid sequence into the genome of a plant cell and regenerating a transformed plant therefrom, said method comprising:

- a) transforming a plant cell; and
- b) regenerating a transformed plant therefrom, wherein the transforming and/or regenerating comprises culturing said plant cell on at least one plant transformation media, said at least one plant transformation media comprising an ~~effective~~ amount of lipoic acid or an analog thereof effective for increasing the efficiency of the transformation and/or regeneration of a plant therefrom.

2. (Previously presented) The method of claim 1 wherein the amount of lipoic acid or an analog thereof in said plant transformation media is between about 2 μM and about 2000 μM .

3. (Previously presented) The method of claim 1 wherein the amount of lipoic acid or an analog thereof in said plant transformation media is between about 5 μM and about 1500 μM .

4. (Previously presented) The method of claim 1 wherein the amount of lipoic acid or an analog thereof in said plant transformation media is between about 5 μM and about 100 μM .

5. (Withdrawn) A plant transformation media comprising an effective amount of lipoic acid or an analog thereof.

6. (Withdrawn) The media of claim 5 wherein the amount of lipoic acid or an analog thereof in said plant transformation media is between about 2 μM and about 2000 μM .

7. (Withdrawn) The media of claim 5 wherein the amount of lipoic acid or an analog thereof in said plant transformation media is between about 5 μM and about 1500 μM .

8. (Withdrawn) The media of claim 5 wherein the amount of lipoic acid or an analog thereof in said plant transformation media is between about 5 μ M and about 100 μ M.
9. (Withdrawn) The media of claim 5 wherein said media is suitable for co-cultivation of plant cell or plant tissue with *Agrobacterium*.
10. (Withdrawn) The media of claim 5 wherein said media is suitable for the selection of transformed plant cells or tissues.
11. (Withdrawn) The media of claim 5 wherein said media is suitable for regeneration of transformed plant cells or tissues into whole fertile plants.
12. (Withdrawn) The method of claim 1, wherein the transformed plant is a transformed tomato plant, and wherein the method comprises:
 - a) isolating a tomato explant suitable for transformation;
 - b) combining said tomato explant with a heterologous gene construct containing a gene of interest to produce a transformed tomato explant;
 - c) culturing said transformed tomato explant in said plant transformation media for selection and shoot induction to produce transformed shoots therefrom, said plant transformation media containing an effective amount lipoic acid;
 - d) identifying said transformed shoots; and
 - e) rooting said transformed shoots to produce a transformed tomato plant.
13. (Withdrawn) The method of claim 1, wherein the transformed plant is a transformed potato plant, and wherein the method comprises:
 - a) isolating a potato explant suitable for transformation;
 - b) combining said potato explant with a heterologous gene construct containing a gene of interest to produce a transformed potato explant;
 - c) culturing said transformed potato explant in said plant transformation media containing an effective amount of lipoic acid until transformed shoots form from said explants; and
 - d) rooting said transformed shoots to produce a transformed potato plant.

14. (Withdrawn) The method of claim 1, wherein the transformed plant is a transformed wheat plant, and wherein the method comprises:

- a) isolating a wheat explant suitable for transformation;
- b) combining said wheat explant with a heterologous gene construct containing a gene of interest to produce a transformed wheat explant;
- c) culturing said transformed wheat explant in said plant transformation media containing an effective amount of lipoic acid and a selective agent to select for transformed wheat explants;
- d) culturing said transformed wheat explants in a second plant transformation media containing an effective amount of lipoic acid to regenerate transformed shoots from said transformed wheat explants; and
- e) rooting said transformed shoots to produce a transformed wheat plant.

15. (Withdrawn) The method of claim 1, wherein the transformed plant is a transformed soybean plant, and wherein the method comprises:

- a) isolating a soybean explant suitable for transformation;
- b) combining said soybean explant with a heterologous gene construct containing a gene of interest to produce a transformed soybean explant in said plant transformation media containing an effective amount of lipoic acid;
- c) culturing said transformed soybean explant in a plant transformation media containing a selective agent to select for transformed soybean explants containing the gene of interest and producing transformed shoots therefrom; and
- d) rooting said transformed shoots to produce a transformed soybean plant.